



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/613,377  
Source: O/E  
Date Processed by STIC: 7/28/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/613,377

DATE: 07/28/2003

TIME: 12:57:10

Input Set : A:\Sequence Listing -Aphton-0059.txt

Output Set: N:\CRF4\07282003\J613377.raw

3 <110> APPLICANT: Aphton Corporation  
 5 <120> TITLE OF INVENTION: Liposomes for Vaccine  
 7 <130> FILE REFERENCE: 1102865-0059  
 9 <140> CURRENT APPLICATION NUMBER: US/10/613,377  
 9 <141> CURRENT FILING DATE: 2003-07-03  
 9 <160> NUMBER OF SEQ ID NOS: 14 *20 (see p. 2)*  
 11 <170> SOFTWARE: PatentIn version 3.0

## ERRORED SEQUENCES

268 <210> SEQ ID NO: 17  
 269 <211> LENGTH: 18 *16 Shown below*  
 270 <212> TYPE: PRI  
 271 <213> ORGANISM: Artificial  
 273 <220> FEATURE:  
 274 <223> OTHER INFORMATION: Synthetic peptide of amino acid sequence 138-145 of human chorionic  
 275 gonadotropin hormone linked to a spacer peptide and conjugated to  
 276 Diphtheria toxoid  
 278 <220> FEATURE:  
 279 <221> NAME/KEY: MOD\_RES  
 280 <222> LOCATION: (1)..(1)  
 281 <223> OTHER INFORMATION: 5-oxoproline  
 283 <220> FEATURE:  
 284 <221> NAME/KEY: MOD\_RES  
 285 <222> LOCATION: (16)..(16)  
 286 <223> OTHER INFORMATION: Cysteine is conjugated to Diphtheria toxoid  
 288 <400> SEQUENCE: 17  
 W--> 290 Xaa Ser Asp Thr Pro Ile Pro Gln Ser Pro Pro Pro Pro Pro Cys  
 E--> 291 1 5 10 15

*many errors*

Does Not Comply  
Corrected Diskette Needed

*ppr 1-10*

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<210> 20 *last sequence in submitted file*  
<211> 15  
<212> PRT  
<213> Artificial

<220>  
<223> Synthetic peptide of amino acid sequence 138-145 of human chorionic gonadotropin hormone linked to a spacer peptide and conjugated to Diphtheria toxoid

<220>  
<221> MOD\_RES  
<222> (1)..(1)  
<223> Cysteine is conjugated to Diphtheria toxoid

<400> 20  
Cys Pro Pro Pro Pro Ser Ser Ser Asp Thr Pro Ile Leu Pro Gln  
1 5 10 15

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3

<210> 2  
<211> 18  
<212> PRT  
<213> Homo sapiens  
<220> <221> MOD\_RES  
<222> (1)..(1)  
<223> Pyroglutamic acid or 5-oxoproline  
  
<400> 2

Xaa Gly Pro Trp Leu Glu Glu Glu Glu Glu Ala Tyr Gly Trp Met Asp Phe Gly  
1 5 10 15

insert  
a  
hard  
return  
after  
<220>

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<210> 3

<211> 5

<212> PRT

<213> Artificial

<220>

<221> MOD RES

<222> (1)..(1)

<223> Pyroglutamic acid or 5-oxoproline

<400> 3

Xaa Gly Pro Trp Leu

1

5

not explained in <220>-<223> section  
(see p.5 for error explanation)

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/613,377

DATE: 07/28/2003  
TIME: 12:57:11

Input Set : A:\Sequence Listing -Apton-0059.txt  
Output Set: N:\CRF4\07282003\J613377.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,13,14,16,17,18,19,20

Use of <220> Feature(NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"  
or "Unknown". Please explain source of genetic material in <220> to <223>  
section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32)  
(Sec.1.823 of new Rules)

Seq#:4,

3,5,7,8  
↓  
seq.4

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<210> 9  
<211> 6  
<212> PRT  
<213> Artificial, hypothetical

do not show this on <2137 line  
show on <2237 line

same end appears in other

sequences

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<210> 16  
<211> 35  
<212> PRT  
<213> Artificial

Insert → <220>

~~<300>~~

<301> U.S. Patent 4,767,842

↓  
<223>

<302>

Anti-peptide antibodies specific for the human chorionic gonadotropin hormone C-terminal fragment (Structure II) corresponding to 111-145 Sequence of the beta subunit.

insert

<307>

<400> 16

move to <310> here

<301> represents  
authors of  
a journal  
article



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8

<210> 13  
<211> 13  
<212> PRT  
<213> Artificial  
<220>  
<223> Synthetic peptide of amino acid sequence 1-6 of human gastrin 34 linked  
to a spacer peptide and conjugated to Diphtheria toxoid

<220>  
<221> MOD\_RES  
<222> (1)..(1)  
<223> Pyroglutamic acid or 5-oxoproline  
<220> MOD\_RES *move down to <221> line*  
<221>  
<222> (13)..(13)  
<223> Cysteine is conjugated to Diphtheria toxoid

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VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/10/613,377

DATE: 07/28/2003

TIME: 12:57:11

Input Set : A:\Sequence Listing -Aphton-0059.txt

Output Set: N:\CRF4\07282003\J613377.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:1; Xaa Pos. 1,17  
Seq#:2; Xaa Pos. 1  
Seq#:3; Xaa Pos. 1  
Seq#:4; Xaa Pos. 1  
Seq#:5; Xaa Pos. 1  
Seq#:6; Xaa Pos. 1  
Seq#:7; Xaa Pos. 1  
Seq#:8; Xaa Pos. 1  
Seq#:12; Xaa Pos. 1  
Seq#:13; Xaa Pos. 1  
Seq#:15; Xaa Pos. 1,10  
Seq#:17; Xaa Pos. 1  
Seq#:18; Xaa Pos. 1  
Seq#:19; Xaa Pos. 17

Please follow the  
above

Please ensure all Xaas  
are explained

see p 10

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<210> 19  
<211> 17  
<212> PRT  
<213> Artificial  
<220>  
<223> Synthetic peptide of GnRH amino acid sequence linked to a  
spacer peptide and conjugated to Diphtheria toxoid

<220>  
<221> MOD\_RES  
<222> (1)..(1)  
<223> Cysteine is conjugated to Diphtheria toxoid

<400> 19

Cys Pro Pro Pro Pro Ser Ser Glu His Trp Ser Tyr Gly Leu Arg Pro Xaa  
1 5 10 15

needs  
explanation!  
(see  
p. 9)

# VERIFICATION SUMMARY

PATENT APPLICATION: US/10/613,377

DATE: 07/28/2003

TIME: 12:57:11

Input Set : A:\Sequence Listing -Apton-0059.txt

Output Set: N:\CRF4\07282003\J613377.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:12 M:283 W: Missing Blank Line separator, <210> field identifier  
L:29 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:36 M:283 W: Missing Blank Line separator, <220> field identifier  
L:36 M:256 W: Invalid Numeric Header Field, <220> has non-blank data  
L:42 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:2  
L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:51 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3  
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:65 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:4, <213>  
ORGANISM:Artificial  
L:65 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:4, <213>  
ORGANISM:Artificial  
L:65 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:65  
L:67 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4  
L:67 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4  
L:67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:82 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:89 M:283 W: Missing Blank Line separator, <220> field identifier  
L:92 M:283 W: Missing Blank Line separator, <220> field identifier  
L:93 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6  
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:108 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7  
L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:136 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9  
L:149 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10  
L:150 M:283 W: Missing Blank Line separator, <220> field identifier  
L:159 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11  
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:192 M:283 W: Missing Blank Line separator, <220> field identifier  
L:201 M:256 W: Invalid Numeric Header Field, <220> has non-blank data  
L:202 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:13  
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:215 M:283 W: Missing Blank Line separator, <220> field identifier  
L:223 M:283 W: Missing Blank Line separator, <400> field identifier  
L:245 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:259 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:16, <213>  
ORGANISM:Artificial  
L:259 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16, <213>  
ORGANISM:Artificial  
L:259 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:259  
L:290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:291 M:252 E: No. of Seq. differs, <211> LENGTH:Input:18 Found:16 SEQ:17  
L:313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:319 M:283 W: Missing Blank Line separator, <220> field identifier  
L:330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:9 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (14) Counted (20)